IN THE CLAIMS

Please amend the claims as follows:

Claims 1-29 (Canceled).

Claim 30 (Currently Amended): ~~A process for separation of two elements of a structure containing the two elements brought into adherent contact with one another by respective bonded adherent faces and with at least one interface;~~

~~wherein the process involves, before the elements are brought into adherent contact, carrying out of at least one cavity, said cavity being made in at least one of the elements and emerging respectively at the interface, so as to enable passage in the cavity of separation means; and wherein the process also involves, at separation, exertion of a force, in a localized manner at the interface, by application of the separation means, to initiate separation of the two elements starting at the interface, and to continue the separation process, if applicable, until complete separation of the two elements~~

A process for separating two semiconductor substrate wafers along an interface including all points of contact between the wafers, both wafers bonded to one another at adherent faces of the interface, the process comprising:

forming at least one cavity in at least one of the wafers, the cavity providing access of separation means to at least one predetermined zone of the interface;

initiating separation of the wafers along the interface by applying the separation means to the predetermined zone; and

continuing separation of the wafers along the interface, by applying the separation means to the predetermined zone and to separated portions of the interface, until a desired degree of separation is achieved,

wherein points of entry to the cavity are not located solely at an edge surface of the wafers.

Claim 31 (Currently Amended): ~~A separation process in~~ The process of claim 30, in which the separation of the two ~~elements~~ wafers is induced in ~~one or~~ more ~~interfaces~~ than one predetermined zone, in a simultaneous or sequential manner.

Claim 32 (Currently Amended): ~~A separation process in~~ The process of claim 30, wherein the separation means contains means for exerting a mechanical action at the interface.

Claim 33 (Canceled).

Claim 34 (Currently Amended): ~~A separation process in~~ The process of claim 30, wherein the separation means contains means for exerting a chemical action on at least one of the ~~elements~~ wafers at the interface.

Claim 35 (Currently Amended): ~~A separation process in~~ The process of claim 30, wherein the ~~cavities are~~ cavity is obtained, in whole or in part, by engraving.

Claim 36 (Currently Amended): ~~A separation process in~~ The process of claim 30, ~~in which the adherence faces define at least one of interface zones, and~~ in which the ~~cavities are~~ cavity is made at a periphery of at least one of the wafers and provides access of the separation means to ~~elements, in the adherence~~ the adherent faces.

Claim 37 (Currently Amended): ~~A separation process in~~ The process of claim 30, wherein the ~~cavities are~~ cavity is made in an inner region of at least one of the wafers and does not provide access of the separation means to the adherent faces ~~element, at the interface~~.

Claim 38 (Currently Amended): ~~A process in~~ The process of claim 30, wherein ~~at least one~~ the cavity penetrates through at least one wafer ~~element~~ from side to side.

Claim 39 (Currently Amended): ~~A separation process in~~ The process of claim 30, wherein~~, where~~ several predetermined ~~interface~~ zones are planned and are arranged so as to initiate the separation at determined locations of the interface.

Claim 40 (Currently Amended): ~~A separation process in~~ The process of claim 37, ~~wherein, with the fluid being a liquid fluid, the separation means involve microwave excitation of the liquid fluid~~ wherein the separation means contains a liquid, the process further comprising using microwaves to excite the liquid of the separation means.

Claim 41 (Currently Amended): ~~A separation process in~~ The process of claim 30, wherein the two ~~elements~~ wafers adhere to one another with a different adherence energy in different regions of ~~an adherence interface between the elements~~ the adherent faces, so as to initiate separation at a determined location of the ~~adherence interface~~ adherent faces.

Claim 42 (Currently Amended): ~~A separation process in~~ The process of claim 30, for separating two ~~elements of a structure~~ wafers having ~~at least~~ a first interface formed at the ~~adherence~~ adherent faces ~~of the two elements,~~ and ~~at least one~~ a second interface ~~formed in at~~

~~least one of the elements~~, in which [[a]] the separation of the ~~structure~~ wafers is induced at one of the first and second interfaces.

Claim 43 (Currently Amended): ~~A separation process in~~ The process of claim 42, ~~for the separation of a structure with~~ wherein a bonding energy [[in]] of the second interface is lower than a bonding energy of the first interface, and wherein the ~~in which a~~ separation of the ~~structure~~ wafers is induced in the second interface ~~is induced~~.

Claim 44 (Currently Amended): ~~A separation process in~~ The process of claim 42, in which, before the two ~~elements~~ wafers are brought into contact, an embrittled zone is formed in at least one of the two ~~elements~~ wafers at ~~forming~~ the second interface.

Claim 45 (Currently Amended): ~~A separation process in~~ The process of claim 44, in which the embrittled zone is formed using an implantation technique or using a layer adherence technique.

Claim 46 (Currently Amended): ~~A separation process in~~ The process of claim 45, in which the embrittled zone is formed at a shallow depth in one of the ~~elements~~ wafers such that the second interface delimits a thin layer in the ~~element~~ wafer containing the embrittled zone.

Claim 47 (Currently Amended): ~~A device for separating two elements of a structure, adhering to one another by adherence faces at least one of which has cavities in an interface zone so as to be configured to subject at least one of the adherence faces to influence of at least one of a fluid and a mechanical action, where the device contains an enclosure with at~~

~~least one high-pressure chamber, configured to receive the fluid, and at least one low-pressure chamber, and where the enclosure is formed so as to receive the two adherent elements such that the cavities communicate with the high-pressure chamber~~

A device for separating two semiconductor substrate wafers along an interface including all points of contact between the wafers, both wafers bonded to one another at adherent faces of the interface, at least one wafer including a cavity extending to at least one of the adherent faces, points of entry to the cavity not being located solely at an edge surface of the wafers, the device comprising:

fluid or gas for subjecting the at least one of the adherent faces to at least one of a chemical or mechanical action;

an enclosure with at least one high-pressure chamber configured to receive the fluid or gas; and

at least one low-pressure chamber,

wherein the enclosure is formed so as to receive the two wafers such that the cavity communicates with the high-pressure chamber.

Claim 48 (Canceled).

Claim 49 (Currently Amended): ~~A separation device in~~ The device of claim 47, wherein the ~~means for holding the structure contain~~ holding means comprises at least one joint arranged between one of the wafers ~~an element of the structure~~ and a wall of the enclosure.

Claim 50 (Currently Amended): ~~A separation device in~~ The device of claim 49, in which at least one joint is arranged between a main face of at least one ~~element~~ of the wafers in a form of a plate and a wall of the enclosure facing the main face.

Claim 51 (Currently Amended): ~~A separation device in~~ The device of claim 49, in which at least one joint is arranged between an edge of at least one ~~element~~ of the wafers in a form of a plate and a wall of the enclosure facing the edge.

Claims 52-58 (Canceled).

Claim 59 (New): The device of claim 47, wherein the wafers comprise a first wafer and a second wafer, the first wafer being at most 100 micrometers thick and the second wafer being used as a handle for the first wafer.

Claim 60 (New): The device of claim 47, wherein the cavity is formed in the second wafer.

Claim 61 (New): The device of claim 47, wherein the cavity is formed before the wafers are bonded to one another.

Claim 62 (New): The process of claim 30, wherein the wafers comprise a first wafer and a second wafer, the first wafer being at most 100 micrometers thick and the second wafer being used as a handle for the first wafer.

Claim 63 (New): The process of claim 30, wherein the cavity is formed in the second wafer.

Claim 64 (New): The process of claim 30, wherein the cavity is formed before the wafers are bonded to one another.

Claim 65 (New): A process for separation of first and second wafers, the two wafers bonded by adherent faces of an interface including all points of contact between the first and second wafers, the second wafer including at least one cavity formed in an interface portion of the second wafer so as to extend onto the interface and to face an interface portion of the first wafer, the process comprising:

inserting separation means into the cavity, the separation means comprising a liquid or a gas and inducing a higher pressure within the cavity;

inducing a lower pressure within a chamber bounded, in part, by at least one of the two wafers; and

preventing excessive deformation of at least one of the two wafers, by providing a stopper within the chamber having the lower pressure.

Claim 66 (New): The process of claim 65, in which the separation of the two wafers is induced in one or more of the interface portions, in a simultaneous or sequential manner.

Claim 67 (New): The process of claim 65, wherein the separation means further comprises means for exerting a mechanical action at the interface.

Claim 68 (New): The process of claim 65, wherein the separation means further comprises means for exerting a chemical action on at least one of the wafers at the interface.

Claim 69 (New): The process of claim 65, wherein the cavity is obtained, in whole or in part, by engraving.

Claim 70 (New): The process of claim 65, in which the cavity is made at a periphery of at least one of the wafers and permits access of the separation means to the adherent faces.

Claim 71 (New): The process of claim 65, wherein the cavity is made in an inner region of at least one of the wafers and does not permit access of the separation means to the adherent faces.

Claim 72 (New): The process of claim 65, wherein the cavity penetrates through at least one wafer from side to side.

Claim 73 (New): The process of claim 65, wherein several cavities are planned and are arranged so as to initiate the separation at determined locations of the interface.

Claim 74 (New): The process of claim 71, wherein the separation means contains a liquid, the process further comprising using microwaves to excite the liquid of the separation means.

Claim 75 (New): The process of claim 65, wherein the two wafers adhere to one another with a different adherence energy in different regions of the adherent faces, so as to initiate separation at a determined location of the adherent faces.

Claim 76 (New): The process of claim 65, for separating two wafers having at least a first interface portion formed at the adherent faces and at least one second interface portion, in which the separation of the wafers is induced at one of the first and second interface portions.

Claim 77 (New): The process of claim 76, wherein a bonding energy in the second interface portion is lower than a bonding energy of the first interface portion, and wherein the separation of the wafers is induced in the second interface portion.

Claim 78 (New): The process of claim 76, in which, before the two wafers are brought into contact, an embrittled zone is formed in at least one of the two wafers at the second interface portion.

Claim 79 (New): The process of claim 78, in which the embrittled zone is formed using an implantation technique or using a layer adherence technique.

Claim 80 (New): The process of claim 79, in which the embrittled zone is formed at a shallow depth in one of the wafers such that the second interface portion delimits a thin layer in the wafer containing the embrittled zone.